

## Basic Facts Cocaine

**Cocaine and crack are toxic, addictive, psychoactive substances** that have significant physiological and psychological consequences for users. Perhaps even more significant and unfortunate, however, are the negative effects that cocaine and crack users have on their families, communities, workplaces, and society. Domestic violence and random violence are often fueled by cocaine or crack. Children are often the victims of cocaine- or crack-using parents and suffer from pre natal exposure or parental abuse.

Substantial declines in "recreational" cocaine use were recorded in the late 1980s and early 1990s. But, by the mid-1990s, there was evidence of increasing use, particularly among adolescents.

## What is Cocaine?

**Cocaine is a central nervous system stimulant**, the most powerful found in nature. Most often seen in the form of cocaine hydrochloride, a white, crystalline powder, it is extracted from the leaves of the coca plant, *Erythroxylon coca*, indigenous to the highlands of the Andean mountains in South America. The Incas used coca leaves as a part of their religious rites thousands of years ago. Over the centuries, laborers of the Andes, who toil under harsh conditions, have either chewed coca leaves or brewed tea from them to relieve apoxia (mountain sickness that occurs at high altitudes), hunger, and fatigue and for refreshment.

## Cocaine in the United States

**Cocaine was first isolated from the coca leaf in the late 1800s.** It quickly became popular as an ingredient in patent medicines (throat lozenges, tonics, etc.) and other products (e.g., Coca Cola, from which it was later removed). Concern soon mounted due to instances of addiction, psychotic behavior, convulsion, and death. A series of steps, including passage of the Pure Food and Drug Act of 1906, were taken to combat health and behavioral problems associated with the use of cocaine and other drugs. Finally, the Harrison Act of 1914 was enacted, outlawing the use of cocaine and opiates in over-the-counter products and making these drugs available only by prescription. Cocaine use soon dropped dramatically and remained at minimal levels for nearly half a century. It continued to be used as a local anesthetic in eye, nose, and throat surgery, however, and still is used today.

**In the 1960s, illicit cocaine use rebounded.** Although cocaine powder was expensive, selling at about \$100 per gram, use of the drug had become common among middle- and upper-middle-class Americans by the late 1970s. A kind of generational forgetting had occurred. Lost were the lessons about cocaine's toxicity and the dangers of abuse

that had been learned from the cocaine epidemic earlier in the century. By the mid-1980s, there was widespread evidence of physiological and psychological problems among cocaine users, with increased emergency-room episodes and admissions to treatment.

### **What is Crack?**

**Crack is a smokable, rapidly reacting form of cocaine base**, which is processed from cocaine hydrochloride. It usually appears as off-white chips, rocks, or chunks. There are many theories about the origin of the crack form of cocaine. It is probable that cocaine traffickers, seeking a broader market for an existing glut of the drug, developed the process to expand their user base, since this method allows small amounts to be sold at very low prices.

### **America's Crack Epidemic**

**Soon after crack first appeared, in the early to mid-1980s**, crack abuse swept through the country. Three factors contributed to this: first, the drug was cheap and affordable; second, it was easy to smoke; and third, its effects were rapid and intense. Smoking crack brings users to a euphoric state twice as fast as "snorting." Because of this rapid high, crack is more quickly addicting; it is also cheap enough to be available to poor and young users. This has made crack an extremely marketable product.

### **How are These Drugs Taken?**

**The primary route of administration** for cocaine powder is through inhalation, commonly referred to as "snorting." This is often done in a ritualistic way; e.g., poured onto a mirror, chopped, separated into "lines," and then "snorted" off a small "coke" spoon, or through a straw or rolled-up currency. Some users dissolve the powder in water and inject it into veins, though this is less common than "snorting."

Crack is smoked. This is easier than "snorting" and carries much less social stigma than injection. Chips or chunks are usually placed in a pipe, often made of glass, or a similar vessel and heated with a match or cigarette lighter. The user inhales the fumes.

### **How Do They Affect You?**

**Cocaine in all its forms stimulates the central nervous system.** It causes the heart to beat more rapidly and blood vessels to constrict. This results in the demand for a greater supply of blood. But the narrowed blood vessels are unable to deliver the volume of blood demanded, which significantly increases the risk of cardiovascular

incidents or strokes. Initially, use of these drugs reduces appetite and makes the user feel more alert, energetic, and self-confident—even more powerful.

**With high doses, users can become delusional, paranoid, and even suffer acute toxic psychosis.** Blood pressure increases, which can cause strokes or heart attacks. In some cases these effects have proven fatal. As the drug's effects wear off, a depression (often called a "crash") can set in, leaving the user feeling fatigued, jumpy, fearful, and anxious.

**Crack causes the same effects as powder cocaine. Because it is smoked, however, onset is more rapid and intensity greater.** Thus, the effects may be significantly exacerbated. The depression following use is described as considerably deeper and more profound. The likelihood of cocaine psychosis after binging on crack may be greater and notably more intense. Crack use is associated with incidents of hyperactive violence by users and is capable of doing significant harm to fetuses of pregnant users.

## **Paying the Price of Cocaine and Crack Use**

A broad range of consequences include:

- Dependence and addiction
- Cardiovascular problems, including irregular heartbeat, heart attack, and heart failure
- Neurological incidents, including strokes, seizures, fungal brain infections, and hemorrhaging in tissue surrounding the brain
- Pulmonary effects, such as fluid in the lungs, aggravation of asthma and other lung disorders, and respiratory failure
- Psychiatric complications, including psychosis, paranoia, depression, anxiety disorders, and delusions
- Increased risk of traumatic injury from accidents and aggressive, violent, or criminal behavior
- Other effects include: sleeplessness, sexual dysfunction, diminished sense of smell, perforated nasal septum, nausea, and headaches.
- Crack users often singe eyebrows or eyelashes with the flame of matches or lighters. They also burn fingertips and other body parts from contact with superheated vessels (e.g., glass pipes).
- Fetal cocaine effects include premature separation of the placenta, spontaneous abortion, premature labor, low birthweight and head circumference at birth, greater chance of visual impairment, mental retardation, genitourinary malformations, and greater chance of developmental problems.
- For intravenous (IV) cocaine users, there is increased risk of hepatitis, HIV infection, and endocarditis.
- For addicts, whether they smoke, inject, or snort, promiscuous sexual activity can increase the risk of HIV infection.